1	20	30	40	50	60
TCATGTTTCA	[illegible]GGAACGACG	AATTTATCCC	GTCGTTTCT[illegible]	[illegible]CTTTCCGTT	TTAACTCATA

70	80	90	100	110	120
TCTCTTCCTG	GATCCTTCAG	AGCTCTTGTC	AATTCCTCAC	GTTTTTTTTT	GTTTTTTCGT

130	140	150	160	170	180
CGTTTAATTG	TGGAAACACA	TATCCGTCCT	CTTTGAAACA	GCATCAGAAA	ACTTTCTGCT

190	200	210	220	230	240
CTCCGTGTCC	TTCTACTTAC	TCTGATTGCC	TTAGTTAGTC	ACATCGCAAG	CAACAACTAA

250	260	270	280	290	300
CTGCCAATGG	GAGGAGCCAG	TTGGAGCAGG	GTGCGTGCTC	GGTGCTCTTT	TCAGAAGGTT

310	320	330	340	350	360
TTCTCTTGTG	CCAGCATGCT	TTTTTGAGGC	TGTGTCATCA	CAATGAACAT	GTGTGAGTTC

370	380	390	400	410	420
ATCCGTCTGG	ATTATTCTTT	TTCTTACGTC	TTCTGAGTAC	TTCATACTTT	CCAAATTTTT

430	440	450	460	470	480
CAACTGAACT	TTTCTTCTTT	TCTCATTGAA	GTGGTTTGGT	TTTGGTCGCG	TGATCAACGG

490	500	510	520	530	540
ATCCTACTTT	TTTGAAACAA	AATGTTTTTG	AAGTTTCACA	GACTGATTTC	GGGGTTTTTT

550	560	570	580	590	600
CAAAGAATAT	ATTCCCTCTC	GAGCAAGAGA	AAATTCCAGA	AAATAGTAGT	TTTTTTCAAT

610	620	630	640	650	660
TAGTCGTTTC	ATTTGTACTA	GCTAAAAAAC	TTGCAACTTA	TGGCTTTAAA	ACATGTGTTG

670	680	690	700	710	720
GCTTCATACA	AAAACATTTA	ACTAGTGTTT	TTCCAGTTTT	GTGTTCGTTT	CATTTTCTCA

730	740	750	760	770	780
CCAAACTGAC	AATAATTACT	TTCTGTGAAC	GTGTTTTGTA	GGCAAGCTCC	CGAATATTTT

790	800	810	820	830	840
TTTCTCTTCT	CACGTCTTGT	TATTTTCTCG	ATTTTATTTT	CTGAATCTGT	GCGGTTTTCA

850	860	870	880	890	900
ATCAATTTGA	TTGCGATAAT	TATTCTATCA	GAAATATATT	TTCAGAAATC	CAAATACTCC

910	920	930	940	950	960
AGGTGCCAAT	GCGGTGAAAG	AAAATTATGA	AGTTTATTCC	TGAAATCACA	CTACTCTTGC

970	980	990	1000	1010	1020
TTTTATTTGT	ACACTCTACA	CAGGTTAGTT	GGTTGATTCT	AGATCTCTTG	CCTCCTAGCT

1030	1040	1050	1060	1070	1080
TGCAAGGATA	ATATAATTGA	ATTGTTTTTG	AGGAGTGCAA	AGATTGAATA	GTTTTCTATA

1090	1100	1110	1120	1130	1140
TTTAGGCTAA	AGGAAAACGA	CGGAAATGTC	CGGAGGGTGC	GTGGTCGGAA	GGAAAGATTA

Fig. 1

1150 1160 1170 1180 1190 1200
TGAACACGAT CATGAGCAAC TACACGAAAA TGTTGCCCGA [illegible]CGGAGGAC AGCGTACAAG

1210 1220 1230 1240 1250 1260
TTAATATTGA GATTCATGTA CAGGTTGGTA GACTCTATAA TTGCACACCA ATATGTGAAA

1270 1280 1290 1300 1310 1320
GTTTTCTTTA AAATTAAACT GCTGTAAATG ACTTTTGAAT AAGTTTATCA GATAGAAATT

1330 1340 1350 1360 1370 1380
GTCTGAACTT TTCGATTCAA ACTTTCCGAA CTTCAAAGCG GTTCCAAATT ACTCACTTCC

1390 1400 1410 1420 1430 1440
ATTTATCTCT TTGCTACAAT TTCTCCCACA AAGCCTTTTT CTTCATTTAA CGTTCTTTTT

1450 1460 1470 1480 1490 1500
TATGTCGTTG TTCTTACAAA CAATTTCGTC TCCTTGATGA ACTGCTTGAA CTGAGAATAG

1510 1520 1530 1540 1550 1560
TCACATGAGG ATAAATTTGA TGGAATGACA AGTTTTGTGC CCAGAAGGCA GTTTTGCACT

1570 1580 1590 1600 1610 1620
GAACTTGTTC AGTTGCAGAC ACATCTCAAA ACACAGAAGA TGAGTGGAAA ACTAGTGAGA

1630 1640 1650 1660 1670 1680
GACTGCCAAA AGTCGAAGGG ATAATGAAAA TTTGTTGCAA ATGAATTCTG CGAAGTTATG

1690 1700 1710 1720 1730 1740
TGAAAAATTA TTGGATTGGG AGTTGTGGGA GTGAAGAGAT GGGTCAAAAG CCATCAATCT

1750 1760 1770 1780 1790 1800
TGAATGCTTC GGTCAAAGAT TTGTTTCTCA TATGTTTACA ACACTGAAAA CAATCTATCC

1810 1820 1830 1840 1850 1860
TAGAAATGTT TGAACCACCC TCTAAAGTCC TTCCGTATAT TTTTTCATCT TTATACCGAC

1870 1880 1890 1900 1910 1920
CAGAATTCAA GAGTTGTTTG AAATAACTTC CTCTTTTTTG GAGAATATGT ACTCAGATTT

1930 1940 1950 1960 1970 1980
TTACATTCAA AATTTATATA TTTTCAAATA GAAAAAGTGC CAAGTACCAG AAACTTTTAT

1990 2000 2010 2020 2030 2040
CAAGTTGGCG GCACTTTGGA GAGTGAATTT GATGAAAAAG TGTTTGATAA GTTTGTCGGG

2050 2060 2070 2080 2090 2100
CAAACTGGTC CCCTGGGTGG GGAAATGGTG GCATTTTTGG AAACATTTTC ATAGTCGAAG

2110 2120 2130 2140 2150 2160
AAGTGGAACA AGAAAATTGG AAAATAGAGA TACATATGTA TATGAAAATA GAATTGAACA

2170 2180 2190 2200 2210 2220
GGAACTTATT TTTATTTTCA GGATATGGGA AGCTTGAATG AAATATCATC CGACTTTGAA

2230 2240 2250 2260 2270 2280
ATTGACATTT TATTCACTCA ACTGTGGCAT GACTCGGCAC TTTCTTTTGC TCATCTTCCG

Fig. 1

2290 2300 2310 2320 2330 2340
GCTTGTAAGC GGTAAGAAAT CTTTGTATTA GAAGGAAA[illegible] [illegible]TATTTAAAT TAATGAAATT

2350 2360 2370 2380 2390 2400
TCAGAAATAT CACAATGGAA ACACGACTTT TACCTAAGAT TTGGTCTCCA AACACGTGTA

2410 2420 2430 2440 2450 2460
TGATTAATTC AAAACGAACA ACCGTCCATG CATCACCATC GGAAAATGTG ATGGTTATTC

2470 2480 2490 2500 2510 2520
TGTACGAGGT ATGATTTTTG ATTTTGTGAC GTCACAAACA GAGCATGTCT AAGGGCATGT

2530 2540 2550 2560 2570 2580
TGTAGCAAGA AAAAAACGGA TTCTTGTCTC TGTCGACGTT TCCTAAGTAT TGTGAATTAT

2590 2600 2610 2620 2630 2640
TTATAATACA TCACTCTAAT TACGTGAATA CTTACACCTT TAACTGGGTG AAGGATAAAA

2650 2660 2670 2680 2690 2700
TAGAGAAGGA GACGTTGAAA AAGCTCTTCG GTAGATTAAA GAGTCTAGAA TCGACATATG

2710 2720 2730 2740 2750 2760
TATTCATGTT TCTCGGTTCA GGGAAATAAG TGATTTTGGC GAAAAAGAGT TAGACGACAT

2770 2780 2790 2800 2810 2820
TTTTTAGAAA ACTAAAACTA TATTCTCGAA CCCAAATCAG TCTAATGGTT TTCAGCAAAA

2830 2840 2850 2860 2870 2880
AGTATGAAAT ATACAATGTT TGTTTCAGAA TACCCAGTAC AAAATTTGAA GTTTTTCAGA

2890 2900 2910 2920 2930 2940
ATGGAACAGT CTGGATTAAC CATCGTCTTA GTGTCAAATC ACCTTGCAAT TTGGATCTGC

2950 2960 2970 2980 2990 3000
GACAGTTTCC TTTCGATACT CAAACTTGCA TATTAATCTT TGAATCCTAT AGTCATAACT

3010 3020 3030 3040 3050 3060
CAGAAGAAGT TGAACTTCAT TGGATGGAAG AAGCTGTCAC ATTAATGAAG CCAATTCAAC

3070 3080 3090 3100 3110 3120
TTCCTGACTT TGATATGGTT CATTATTCAA CTAAAAAGGA AACTTTACTC TATCCAAACG

3130 3140 3150 3160 3170 3180
GGTACTGGGA TCAGCTTCAA GTTACTTTCA CTTTCAAACG ACGATATGGA TTCTATATTA

3190 3200 3210 3220 3230 3240
TTCAAGCCTA TGTTCCAACA TATCTTACAA TCATTGTATC TTGGGTTTCA TTCTGCATGG

3250 3260 3270 3280 3290 3300
AACCAAAAGC TCTGCCGGCA AGAACAACTG TCGGAATCTC ATCTCTTCTA GCTCTTACTT

3310 3320 3330 3340 3350 3360
TCCAGTTTGG AAATATTTTG AAAAATCTTC CAAGGGTTTC ATATGTGAAA GGTTTGTTTT

3370 3380 3390 3400 3410 3420
TTTTCTTTTT CAAACAAATA AAAAAAAAGA TAAACAAATA TTTGTTTCAG CAATGGATGT

Fig. 1

3430 3440 3450 3460 3470 3480
GTGGATGCTT GGATGCATAT CATTTGTCTT CGGAACCATG [illegible]TAGAATTGG CATTTGTTTG

3490 3500 3510 3520 3530 3540
TTACATTTCC CGTTGTCAGA ACAGCGTAAG AAAGTGAGTT GGCATAAGAG TTTTCTCACG

3550 3560 3570 3580 3590 3600
TGGAGGGAAG TAATTAAATT TTGGGTGTCA TATGAAAATA TCAAAAACAA TATCAGGAAA

3610 3620 3630 3640 3650 3660
TTGAATTTCA CTATGATTTC GTAGTAAACA AATTACAGCG CGGAACGACG ACGGGAACGA

3670 3680 3690 3700 3710 3720
ATGAGAAATT CTCAGGTGTG GGCAAACGGA TCGTGTAGAA CTAGAAGCAA CGGGTATGCA

3730 3740 3750 3760 3770 3780
AACGGGGGAT CTGTAATCTC ACATTATCAT CCAACAAGCA ATGGAAATGG GAATAATAAT

3790 3800 3810 3820 3830 3840
CGACATGATA CACCTCAAGT TACTGGAAGG TTAGCAATCT CTATGATAGC ATTTATCAAT

3850 3860 3870 3880 3890 3900
TATTAAAGAA CTCTGGAATT AGTTTTTAAA GTATAAATAA ATCTCTATTT CTTGCGACCT

3910 3920 3930 3940 3950 3960
ACATTGAACT TAATAGTTAT GTTTTACAGA GGATCACTTC ATCGAAACGG GCCACCATCT

3970 3980 3990 4000 4010 4020
CCATTAAACC TTCAAATGAC TACATTTGAT TCGGAGATCC CTCTGACTTT TGATCAGGTG

4030 4040 4050 4060 4070 4080
AGTCTTACAT TGAGTTCAAA CTTTTTGAAT TTAAGCGTTC TATCTGATAA AGTTCTTCGG

4090 4100 4110 4120 4130 4140
TGGTTTTATA ATTTTTGATT CATAAACTTA CCCACTCCTT TCTCACTAAC ATTTTACCCT

4150 4160 4170 4180 4190 4200
GTTCAGCTGC CAGTTTCCAT GGAATCCGAT AGACCCCTGA TTGAAGAGGT AACTGTGAAA

4210 4220 4230 4240 4250 4260
GTAGTCAATT AATTCCCTGT GTTTCTACCC CACTCAATCC TTTTGTATTT TTTGTTCAGT

4270 4280 4290 4300 4310 4320
CTATCCACTA TCAATGTCTT ATCACCTCTA GATACTGTTT AGAAGAAAAT ATTGTTCACA

4330 4340 4350 4360 4370 4380
GTTATGGAAA TCACATATAC TTTGTTCTGG AATTGTATAT GTATGCTTTG AAAAAGCACA

4390 4400 4410 4420 4430 4440
TTAGAATACT ACAAACATTA GTTTCCATCA GATTTTTGAT TTATCAAAAC CGTTATATTA

4450 4460 4470 4480 4490 4500
GACACTCTTA AGTTATCATA TTCTAATTTC CAAGAATGTT ATATTTTGAA GAAGCCGGTG

4510 4520 4530 4540 4550 4560
ATTGTCAAAA AGATTGAAAA CTCCGAGTTT CTATATATGC GAAATTTTCA CTTCAGCCCA

Fig. 1

457 4580 4590 460 4610 4620
CACACACACA CACACATTCA CGAAACTTTG TGTTGTTTAT GTTACTTATA TGTTATCTTT

4630 4640 4650 4660 4670 4680
TCTGTCTGAT CATGGTTTTC GGACTGAAAT TGTGTTAATC GGAAGTTATA TGTGAGCCAC

4690 4700 4710 4720 4730 4740
ATTGATTAAA CCTGTGAGAG ATGCCCATTT GTACTCATTT TACGACTGTC TCATGTCCAA

4750 4760 4770 4780 4790 4800
ACACCATGTT TATTGTAATT ACCAGGCTAC TATTTGCAGA TGCGATCAAC ATCACCACCT

4810 4820 4830 4840 4850 4860
CCACCATCTG GATGTCTGGC CAGATTCCAT CCGGAAGCAG TGGACAAATT CTCCATTGTA

4870 4880 4890 4900 4910 4920
GCTTTTCCAT TGGCATTTAC AATGTTTAAT GTTAGTTAAT CCACAGTTAA AAATTCCCAT

4930 4940 4950 4960 4970 4980
AATCATAAAT ATCTCGACTT TTCAGCTTGT CTACTGGTGG CACTATTTGT CTCAAACTTT

4990 5000 5010 5020 5030 5040
CGATCAAAAC TATCAGTGAT TGAAGTTTAT CCCTTTTAAT TCCAATAATT CACAGTTGCC

5050 5060 5070 5080 5090 5100
GGTATCTACC TCCATTCTTT TCCGATGATT CGCAGTTTTT CACAGGGTTC AAATGTATCT

5110 5120 5130 5140 5150 5160
CGTTCAATCT TTTTATGGTT ATTTCTCTTG AATGTCCATT TTAATATTTA TAGAACACTT

5170 5180 5190 5200 5210 5220
TTATGTACAT TGTGTTGGTA TTCAATTCGA AAAACAATGA AATTTATTTC TAAATAACTG

5230 5240 5250 5260 5270 5280
CGTTTCTGGG GTTTCTATCA GCACTTACTA GCTGACAAAA ACTTTTCCGT ATTCGGAATT

5290 5300 5310 5320 5330 5340
AGATTTTTAT GCAAGCAATG TTTCATTTTT ACACAGTATA GTATTTATTC TTACTTTTGA

5350 5360 5370 5380 5390 5400
TTATATTGCT CGCACCCTAA ATGACAGGTA TTAGAAATTA ACCGCTTTTC AGAGTATTTT

5410 5420 5430 5440 5450 5460
TAATCTTCTT AGTACTAGTT TAGTTCTTTA AATAAGAAAC CATCTAGTTT TTCATTATCA

5470 5480 5490 5500 5510 5520
CTCAACTTCA GTCGGACAAA TTTTAAATTT TTTACTCGAT AAAAAAATTT TATAATTCAG

5530 5540 5550
ACAAATTATG TCTTCTCATT TTTGATCGCT

Fig. 1

```
1                   20                  30                  50
ATGAAGTTTA TTCCTGAAAT CACACTACTC TTGCTTTTAT TTGTACACTC

60          70          80          90          100
TACACAGGCT AAAGGAAAAC GACGGAAATG TCCGGAGGGT GCGTGGTCGG

110         120         130         140         150
AAGGAAAGAT TATGAACACG ATCATGAGCA ACTACACGAA AATGTTGCCC

160         170         180         190         200
GACGCGGAGG ACAGCGTACA AGTTAATATT GAGATTCATG TACAGGATAT

210         220         230         240         250
GGGAAGCTTG AATGAAATAT CATCCGACTT TGAAATTGAC ATTTTATTCA

260         270         280         290         300
CTCAACTGTG GCATGACTCG GCACTTTCTT TTGCTCATCT TCCGGCTTGT

310         320         330         340         350
AAGCGAAATA TCACAATGGA AACACGACTT TTACCTAAGA TTTGGTCTCC

360         370         380         390         400
AAACACGTGT ATGATTAATT CAAAACGAAC AACCGTCCAT GCATCACCAT

410         420         430         440         450
CGGAAAATGT GATGGTTATT CTGTACGAGA ATGGAACAGT CTGGATTAAC

460         470         480         490         500
CATCGTCTTA GTGTCAAATC ACCTTGCAAT TTGGATCTGC GACAGTTTCC

510         520         530         540         550
TTTCGATACT CAAACTTGCA TATTAATCTT TGAATCCTAT AGTCATAACT

560         570         580         590         600
CAGAAGAAGT TGAACTTCAT TGGATGGAAG AAGCTGTCAC ATTAATGAAG

610         620         630         640         650
CCAATTCAAC TTCCTGACTT TGATATGGTT CATTATTCAA CTAAAAAGGA

660         670         680         690         700
AACTTTACTC TATCCAAACG GGTACTGGGA TCAGCTTCAA GTTACTTTCA

710         720         730         740         750
CTTTCAAACG ACGATATGGA TTCTATATTA TTCAAGCCTA TGTTCCAACA

760         770         780         790         800
TATCTTACAA TCATTGTATC TTGGGTTTCA TTCTGCATGG AACCAAAAGC

810         820         830         840         850
TCTGCCGGCA AGAACAACTG TCGGAATCTC ATCTCTTCTA GCTCTTACTT

860         870         880         890         900
TCCAGTTTGG AAATATTTTG AAAAATCTTC CAAGGGTTTC ATATGTGAAA

910         920         930         940         950
GCAATGGATG TGTGGATGCT TGGATGCATA TCATTTGTCT TCGGAACCAT
```

Fig. 2
Page 1

960	970	980	990	1000
GGTAGAAT[illegible]	CA[illegible]TGTTT	GTTACATTTC	CCGTTGTC[illegible]	[illegible]ACAGCGTAA
1010	1020	1030	1040	1050
GAAACGCGGA	ACGACGACGG	GAACGAATGA	GAAATTCTCA	GGTGTGGGCA
1060	1070	1080	1090	1100
AACGGATCGT	GTAGAACTAG	AAGCAACGGG	TATGCAAACG	GGGGATCTGT
1110	1120	1130	1140	1150
AATCTCACAT	TATCATCCAA	CAAGCAATGG	AAATGGGAAT	AATAATCGAC
1160	1170	1180	1190	1200
ATGATACACC	TCAAGTTACT	GGAAGAGGAT	CACTTCATCG	AAACGGGCCA
1210	1220	1230	1240	1250
CCATCTCCAT	TAAACCTTCA	AATGACTACA	TTTGATTCGG	AGATCCCTCT
1260	1270	1280	1290	1300
GACTTTTGAT	CAGCTGCCAG	TTTCCATGGA	ATCCGATAGA	CCCCTGATTG
1310	1320	1330	1340	1350
AAGAGATGCG	ATCAACATCA	CCACCTCCAC	CATCTGGATG	TCTGGCCAGA
1360	1370	1380	1390	1400
TTCCATCCGG	AAGCAGTGGA	CAAATTCTCC	ATTGTAGCTT	TTCCATTGGC
1410	1420	1430	1440	1450
ATTTACAATG	TTTAATCTTG	TCTACTGGTG	GCACTATTTG	TCTCAAACTT
1460	1470			
TCGATCAAAA	CTATCAGTGA			

Fig. 2
Page 2

```
          10        20        30        40        50
MKFIPEITL  LLFVHSTQA KGKRRKCPEG AWSEGKIM  MSNYTKMLP

          60        70        80        90       100
DAEDSVQVNI EIHVQDMGSL NEISSDFEID ILFTQLWHDS ALSFAHLPAC

         110       120       130       140       150
KRNITMETRL LPKIWSPNTC MINSKRTTVH ASPSENVMVI LYENGTVWIN

         160       170       180       190       200
HRLSVKSPCN LDLRQFPFDT QTCILIFESY SHNSEEVELH WMEEAVTLMK

         210       220       230       240       250
PIQLPDFDMV HYSTKKETLL YPNGYWDQLQ VTFTFKRRYG FYIIQAYVPT

         260       270       280       290       300
YLTIIVSWVS FCMEPKALPA RTTVGISSLL ALTFQFGNIL KNLPRVSYVK

         310       320       330       340       350
AMDVWMLGCI SFVFGTMVEL AFVCYISRCQ NSVRNAERRR ERMRNSQVWA

         360       370       380       390       400
NGSCRTRSNG YANGGSVISH YHPTSNGNGN NNRHDTPQVT GRGSLHRNGP

         410       420       430       440       450
PSPLNLQMTT FDSEIPLTFD QLPVSMESDR PLIEEMRSTS PPPPSGCLAR

         460       470       480
FHPEAVDKFS IVAFPLAFTM FNLVYWWHYL SQTFDQNYQ
```

Fig. 3

MOD-1 is similar to ligand-gated ion channels

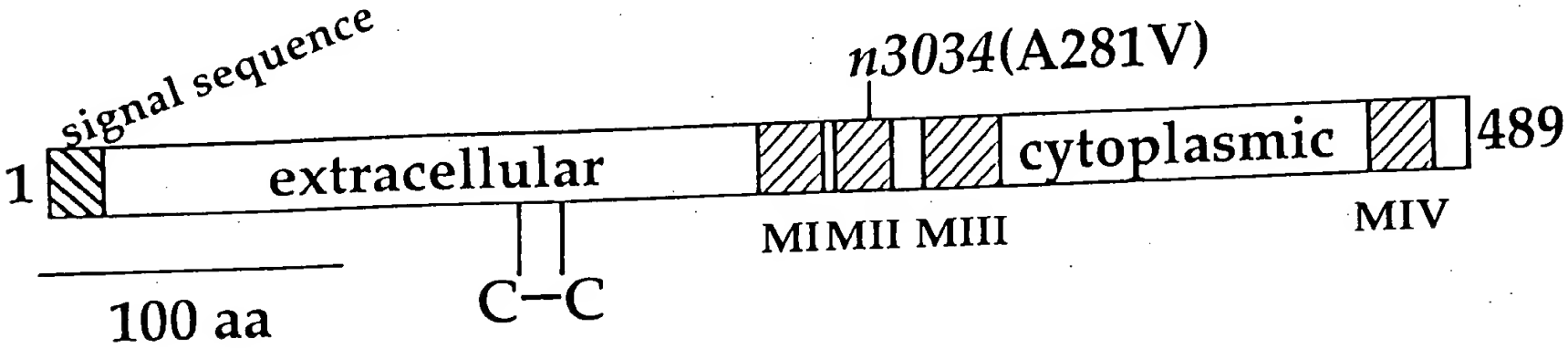

Fig. 4

ok103 is a 4135 bp deletion allele of *mod-1*

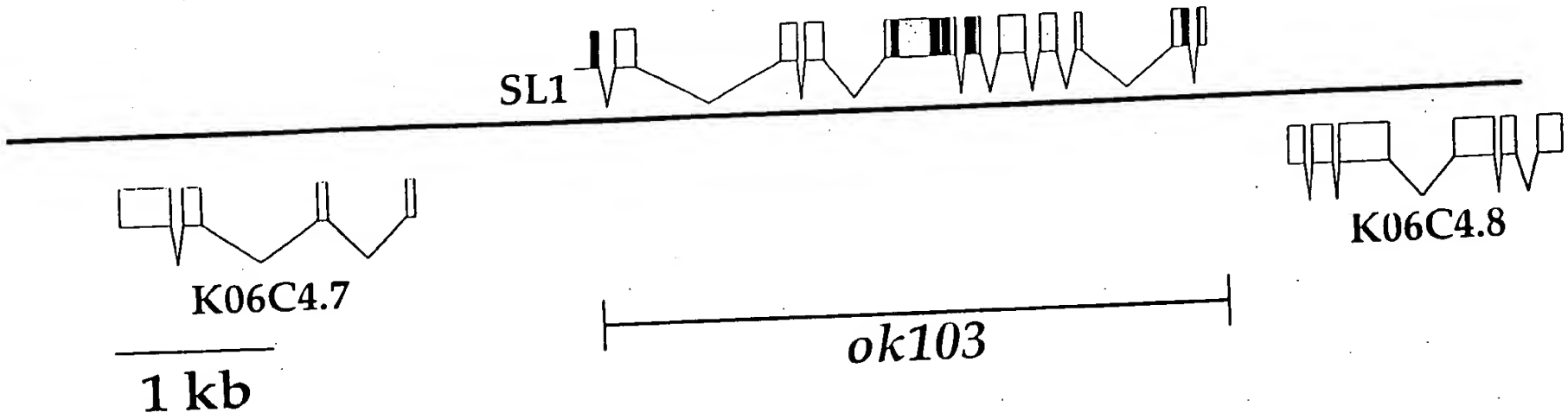

Fig. 5

10	20	30	40	50	60
TCATGTTTCA	CGGAACGACG	AATTTATCCC	GTCGTTTCTT	CCTTTCCGTT	TTAACTCATA
70	80	90	100	110	120
TCTCTTCCTG	GATCCTTCAG	AGCTCTTGTC	AATTCCTCAC	GTTTTTTTTT	GTTTTTTCGT
130	140	150	160	170	180
CGTTTAATTG	TGGAAACACA	TATCCGTCCT	CTTTGAAACA	GCATCAGAAA	ACTTTCTGCT
190	200	210	220	230	240
CTCCGTGTCC	TTCTACTTAC	TCTGATTGCC	TTAGTTAGTC	ACATCGCAAG	CAACAACTAA
250	260	270	280	290	300
CTGCCAATGG	GAGGAGCCAG	TTGGAGCAGG	GTGCGTGCTC	GGTGCTCTTT	TCAGAAGGTT
310	320	330	340	350	360
TTCTCTTGTG	CCAGCATGCT	TTTTTGAGGC	TGTGTCATCA	CAATGAACAT	GTGTGAGTTC
370	380	390	400	410	420
ATCCGTCTGG	ATTATTCTTT	TTCTTACGTC	TTCTGAGTAC	TTCATACTTT	CCAAATTTTT
430	440	450	460	470	480
CAACTGAACT	TTTCTTCTTT	TCTCATTGAA	GTGGTTTGGT	TTTGGTCGCG	TGATCAACGG
490	500	510	520	530	540
ATCCTACTTT	TTTGAAACAA	AATGTTTTTG	AAGTTTCACA	GACTGATTTC	GGGGTTTTTT
550	560	570	580	590	600
CAAAGAATAT	ATTCCCTCTC	GAGCAAGAGA	AAATTCCAGA	AAATAGTAGT	TTTTTTCAAT
610	620	630	640	650	660
TAGTCGTTTC	ATTTGTACTA	GCTAAAAAAC	TTGCAACTTA	TGGCTTTAAA	ACATGTGTTG
670	680	690	700	710	720
GCTTCATACA	AAAACATTTA	ACTAGTGTTT	TTCCAGTTTT	GTGTTCGTTT	CATTTTCTCA
730	740	750	760	770	780
CCAAACTGAC	AATAATTACT	TTCTGTGAAC	GTGTTTTGTA	GGCAAGCTCC	CGAATATTTT
790	800	810	820	830	840
TTTCTCTTCT	CACGTCTTGT	TATTTTCTCG	ATTTTATTTT	CTGAATCTGT	GCGGTTTTCA
850	860	870	880	890	900
ATCAATTTGA	TTGCGATAAT	TATTCTATCA	GAAATATATT	TTCAGAAATC	CAAATACTCC
910	920	930	940	950	960
AGGTGCCAAT	GCGGTGAAAG	AAAATTATGA	AGTTTATTCC	TGAAATCACA	CTACTCTTGC
970	980	990	1000	1010	1020
TTTTATTTGT	ACACTCTACA	CAGGTTAGTT	TCTCTTGAAT	GTCCATTTTA	ATATTTATAG
1030	1040	1050	1060	1070	1080
AACACTTTTA	TGTACATTGT	GTTGGTATTC	AATTCGAAAA	ACAATGAAAT	TTATTTCTAA
1090	1100	1110	1120	1130	1140
ATAACTGCGT	TTCTGGGGTT	TCTATCAGCA	CTTACTAGCT	GACAAAAACT	TTTCCGTATT

Fig. 6

```
      1150        1160        1170        1180        1190        1200
CGGAATTAGA TTTTTATGCA AGCAATGTTT CATTTTTACA CAGTATAGTA TTTATTCTTA

      1210        1220        1230        1240        1250        1260
CTTTTGATTA TATTGCTCGC ACCCTAAATG ACAGGTATTA GAAATTAACC GCTTTTCAGA

      1270        1280        1290        1300        1310        1320
GTATTTTTAA TCTTCTTAGT ACTAGTTTAG TTCTTTAAAT AAGAAACCAT CTAGTTTTTC

      1330        1340        1350        1360        1370        1380
ATTATCACTC AACTTCAGTC GGACAAATTT TAAATTTTTT ACTCGATAAA AAAATTTTAT

      1390        1400        1410
AATTCAGACA AATTATGTCT TCTCATTTTT GATCGCT
```


Fig. 6

```
        10         20         30         40         50         60
TCATGTTTCA CGGAACGACG AATTTATCCC GTCGTTTCTT TTTCCGTT TTAACTCATA

        70         80         90        100        110        120
TCTCTTCCTG GATCCTTCAG AGCTCTTGTC AATTCCTCAC GTTTTTTTTT GTTTTTTCGT

       130        140        150        160        170        180
CGTTTAATTG TGGAAACACA TATCCGTCCT CTTTGAAACA GCATCAGAAA ACTTTCTGCT

       190        200        210        220        230        240
CTCCGTGTCC TTCTACTTAC TCTGATTGCC TTAGTTAGTC ACATCGCAAG CAACAACTAA

       250        260        270        280        290        300
CTGCCAATGG GAGGAGCCAG TTGGAGCAGG GTGCGTGCTC GGTGCTCTTT TCAGAAGGTT

       310        320        330        340        350        360
TTCTCTTGTG CCAGCATGCT TTTTTGAGGC TGTGTCATCA CAATGAACAT GTGTGAGTTC

       370        380        390        400        410        420
ATCCGTCTGG ATTATTCTTT TTCTTACGTC TTCTGAGTAC TTCATACTTT CCAAATTTTT

       430        440        450        460        470        480
CAACTGAACT TTTCTTCTTT TCTCATTGAA GTGGTTTGGT TTTGGTCGCG TGATCAACGG

       490        500        510        520        530        540
ATCCTACTTT TTTGAAACAA AATGTTTTTG AAGTTTCACA GACTGATTTC GGGGTTTTTT

       550        560        570        580        590        600
CAAAGAATAT ATTCCCTCTC GAGCAAGAGA AAATTCCAGA AAATAGTAGT TTTTTTCAAT

       610        620        630        640        650        660
TAGTCGTTTC ATTTGTACTA GCTAAAAAAC TTGCAACTTA TGGCTTTAAA ACATGTGTTG

       670        680        690        700        710        720
GCTTCATACA AAAACATTTA ACTAGTGTTT TTCCAGTTTT GTGTTCGTTT CATTTTCTCA

       730        740        750        760        770        780
CCAAACTGAC AATAATTACT TTCTGTGAAC GTGTTTTGTA GGCAAGCTCC CGAATATTTT

       790        800        810        820        830        840
TTTCTCTTCT CACGTCTTGT TATTTTCTCG ATTTTATTTT CTGAATCTGT GCGGTTTTCA

       850        860        870        880        890        900
ATCAATTTGA TTGCGATAAT TATTCTATCA GAAATATATT TTCAGAAATC CAAATACTCC

       910        920        930        940        950        960
AGGTGCCAAT GCGGTGAAAG AAAATTATGA AGTTTATTCC TGAAATCACA CTACTCTTGC

       970        980        990       1000       1010       1020
TTTTATTTGT ACACTCTACA CAGGTTAGTT GGTTGATTCT AGATCTCTTG CCTCCTAGCT

      1030       1040       1050       1060       1070       1080
TGCAAGGATA ATATAATTGA ATTGTTTTTG AGGAGTGCAA AGATTGAATA GTTTTCTATA

      1090       1100       1110       1120       1130       1140
TTTAGGCTAA AGGAAAACGA CGGAAATGTC CGGAGGGTGC GTGGTCGGAA GGAAAGATTA
```

Fig. 7
Page 1

1150 1160 1170 1180 1190 1200
TGAACACGAT CATGAGCAAC TACACGAAAA TGTTGCCCGA GCGGAGGAC AGCGTACAAG

1210 1220 1230 1240 1250 1260
TTAATATTGA GATTCATGTA CAGGTTGGTA GACTCTATAA TTGCACACCA ATATGTGAAA

1270 1280 1290 1300 1310 1320
GTTTTCTTTA AAATTAAACT GCTGTAAATG ACTTTTGAAT AAGTTTATCA GATAGAAATT

1330 1340 1350 1360 1370 1380
GTCTGAACTT TTCGATTCAA ACTTTCCGAA CTTCAAAGCG GTTCCAAATT ACTCACTTCC

1390 1400 1410 1420 1430 1440
ATTTATCTCT TTGCTACAAT TTCTCCCACA AAGCCTTTTT CTTCATTTAA CGTTCTTTTT

1450 1460 1470 1480 1490 1500
TATGTCGTTG TTCTTACAAA CAATTTCGTC TCCTTGATGA ACTGCTTGAA CTGAGAATAG

1510 1520 1530 1540 1550 1560
TCACATGAGG ATAAATTTGA TGGAATGACA AGTTTTGTGC CCAGAAGGCA GTTTTGCACT

1570 1580 1590 1600 1610 1620
GAACTTGTTC AGTTGCAGAC ACATCTCAAA ACACAGAAGA TGAGTGGAAA ACTAGTGAGA

1630 1640 1650 1660 1670 1680
GACTGCCAAA AGTCGAAGGG ATAATGAAAA TTTGTTGCAA ATGAATTCTG CGAAGTTATG

1690 1700 1710 1720 1730 1740
TGAAAAATTA TTGGATTGGG AGTTGTGGGA GTGAAGAGAT GGGTCAAAAG CCATCAATCT

1750 1760 1770 1780 1790 1800
TGAATGCTTC GGTCAAAGAT TTGTTTCTCA TATGTTTACA ACACTGAAAA CAATCTATCC

1810 1820 1830 1840 1850 1860
TAGAAATGTT TGAACCACCC TCTAAAGTCC TTCCGTATAT TTTTTCATCT TTATACCGAC

1870 1880 1890 1900 1910 1920
CAGAATTCAA GAGTTGTTTG AAATAACTTC CTCTTTTTTG GAGAATATGT ACTCAGATTT

1930 1940 1950 1960 1970 1980
TTACATTCAA AATTTATATA TTTTCAAATA GAAAAAGTGC CAAGTACCAG AAACTTTTAT

1990 2000 2010 2020 2030 2040
CAAGTTGGCG GCACTTTGGA GAGTGAATTT GATGAAAAAG TGTTTGATAA GTTTGTCGGG

2050 2060 2070 2080 2090 2100
CAAACTGGTC CCCTGGGTGG GGAAATGGTG GCATTTTTGG AAACATTTTC ATAGTCGAAG

2110 2120 2130 2140 2150 2160
AAGTGGAACA AGAAAATTGG AAAATAGAGA TACATATGTA TATGAAAATA GAATTGAACA

2170 2180 2190 2200 2210 2220
GGAACTTATT TTTATTTTCA GGATATGGGA AGCTTGAATG AAATATCATC CGACTTTGAA

2230 2240 2250 2260 2270 2280
ATTGACATTT TATTCACTCA ACTGTGGCAT GACTCGGCAC TTTCTTTTGC TCATCTTCCG

Fig. 7
Page 2

2290 2300 2310 2320 2330 2340
GCTTGTAAGC GGTAAGAAAT CTTTGTATTA GAAGGGAAAA TTATTTAAAT TAATGAAATT

2350 2360 2370 2380 2390 2400
TCAGAAATAT CACAATGGAA ACACGACTTT TACCTAAGAT TTGGTCTCCA AACACGTGTA

2410 2420 2430 2440 2450 2460
TGATTAATTC AAAACGAACA ACCGTCCATG CATCACCATC GGAAAATGTG ATGGTTATTC

2470 2480 2490 2500 2510 2520
TGTACGAGGT ATGATTTTTG ATTTTGTGAC GTCACAAACA GAGCATGTCT AAGGGCATGT

2530 2540 2550 2560 2570 2580
TGTAGCAAGA AAAAAACGGA TTCTTGTCTC TGTCGACGTT TCCTAAGTAT TGTGAATTAT

2590 2600 2610 2620 2630 2640
TTATAATACA TCACTCTAAT TACGTGAATA CTTACACCTT TAACTGGGTG AAGGATAAAA

2650 2660 2670 2680 2690 2700
TAGAGAAGGA GACGTTGAAA AAGCTCTTCG GTAGATTAAA GAGTCTAGAA TCGACATATG

2710 2720 2730 2740 2750 2760
TATTCATGTT TCTCGGTTCA GGGAAATAAG TGATTTTGGC GAAAAAGAGT TAGACGACAT

2770 2780 2790 2800 2810 2820
TTTTTAGAAA ACTAAAACTA TATTCTCGAA CCCAAATCAG TCTAATGGTT TTCAGCAAAA

2830 2840 2850 2860 2870 2880
AGTATGAAAT ATACAATGTT TGTTTCAGAA TACCCAGTAC AAAATTTGAA GTTTTTCAGA

2890 2900 2910 2920 2930 2940
ATGGAACAGT CTGGATTAAC CATCGTCTTA GTGTCAAATC ACCTTGCAAT TTGGATCTGC

2950 2960 2970 2980 2990 3000
GACAGTTTCC TTTCGATACT CAAACTTGCA TATTAATCTT TGAATCCTAT AGTCATAACT

3010 3020 3030 3040 3050 3060
CAGAAGAAGT TGAACTTCAT TGGATGGAAG AAGCTGTCAC ATTAATGAAG CCAATTCAAC

3070 3080 3090 3100 3110 3120
TTCCTGACTT TGATATGGTT CATTATTCAA CTAAAAAGGA AACTTTACTC TATCCAAACG

3130 3140 3150 3160 3170 3180
GGTACTGGGA TCAGCTTCAA GTTACTTTCA CTTTCAAACG ACGATATGGA TTCTATATTA

3190 3200 3210 3220 3230 3240
TTCAAGCCTA TGTTCCAACA TATCTTACAA TCATTGTATC TTGGGTTTCA TTCTGCATGG

3250 3260 3270 3280 3290 3300
AACCAAAAGC TCTGCCGGCA AGAACAACTG TCGGAATCTC ATCTCTTCTA GTTCTTACTT

3310 3320 3330 3340 3350 3360
TCCAGTTTGG AAATATTTTG AAAAATCTTC CAAGGGTTTC ATATGTGAAA GGTTTGTTTT

3370 3380 3390 3400 3410 3420
TTTTCTTTTT CAAACAAATA AAAAAAAAGA TAAACAAATA TTTGTTTCAG CAATGGATGT

Fig. 7
Page 3

3430 3440 3450 3460 3470 3480
GTGGATGCTT GGATGCATAT CATTTGTCTT CGGAACCATG GTAGAATTGG CATTTGTTTG

3490 3500 3510 3520 3530 3540
TTACATTTCC CGTTGTCAGA ACAGCGTAAG AAAGTGAGTT GGCATAAGAG TTTTCTCACG

3550 3560 3570 3580 3590 3600
TGGAGGGAAG TAATTAAATT TTGGGTGTCA TATGAAAATA TCAAAAACAA TATCAGGAAA

3610 3620 3630 3640 3650 3660
TTGAATTTCA CTATGATTTC GTAGTAAACA AATTACAGCG CGGAACGACG ACGGGAACGA

3670 3680 3690 3700 3710 3720
ATGAGAAATT CTCAGGTGTG GGCAAACGGA TCGTGTAGAA CTAGAAGCAA CGGGTATGCA

3730 3740 3750 3760 3770 3780
AACGGGGGAT CTGTAATCTC ACATTATCAT CCAACAAGCA ATGGAAATGG GAATAATAAT

3790 3800 3810 3820 3830 3840
CGACATGATA CACCTCAAGT TACTGGAAGG TTAGCAATCT CTATGATAGC ATTTATCAAT

3850 3860 3870 3880 3890 3900
TATTAAAGAA CTCTGGAATT AGTTTTTAAA GTATAAATAA ATCTCTATTT CTTGCGACCT

3910 3920 3930 3940 3950 3960
ACATTGAACT TAATAGTTAT GTTTTACAGA GGATCACTTC ATCGAAACGG GCCACCATCT

3970 3980 3990 4000 4010 4020
CCATTAAACC TTCAAATGAC TACATTTGAT TCGGAGATCC CTCTGACTTT TGATCAGGTG

4030 4040 4050 4060 4070 4080
AGTCTTACAT TGAGTTCAAA CTTTTTGAAT TTAAGCGTTC TATCTGATAA AGTTCTTCGG

4090 4100 4110 4120 4130 4140
TGGTTTTATA ATTTTTGATT CATAAACTTA CCCACTCCTT TCTCACTAAC ATTTTACCCT

4150 4160 4170 4180 4190 4200
GTTCAGCTGC CAGTTTCCAT GGAATCCGAT AGACCCCTGA TTGAAGAGGT AACTGTGAAA

4210 4220 4230 4240 4250 4260
GTAGTCAATT AATTCCCTGT GTTTCTACCC CACTCAATCC TTTTGTATTT TTTGTTCAGT

4270 4280 4290 4300 4310 4320
CTATCCACTA TCAATGTCTT ATCACCTCTA GATACTGTTT AGAAGAAAAT ATTGTTCACA

4330 4340 4350 4360 4370 4380
GTTATGGAAA TCACATATAC TTTGTTCTGG AATTGTATAT GTATGCTTTG AAAAAGCACA

4390 4400 4410 4420 4430 4440
TTAGAATACT ACAAACATTA GTTTCCATCA GATTTTTGAT TTATCAAAAC CGTTATATTA

4450 4460 4470 4480 4490 4500
GACACTCTTA AGTTATCATA TTCTAATTTC CAAGAATGTT ATATTTTGAA GAAGCCGGTG

4510 4520 4530 4540 4550 4560
ATTGTCAAAA AGATTGAAAA CTCCGAGTTT CTATATATGC GAAATTTTCA CTTCAGCCCA

Fig. 7

4570 4580 4590 4600 4610 4620
CACACACACA CACACATTCA CGAAACTTTG TGTTGTTTAT GTTACTTATA TGTTATCTTT

4630 4640 4650 4660 4670 4680
TCTGTCTGAT CATGGTTTTC GGACTGAAAT TGTGTTAATC GGAAGTTATA TGTGAGCCAC

4690 4700 4710 4720 4730 4740
ATTGATTAAA CCTGTGAGAG ATGCCCATTT GTACTCATTT TACGACTGTC TCATGTCCAA

4750 4760 4770 4780 4790 4800
ACACCATGTT TATTGTAATT ACCAGGCTAC TATTTGCAGA TGCGATCAAC ATCACCACCT

4810 4820 4830 4840 4850 4860
CCACCATCTG GATGTCTGGC CAGATTCCAT CCGGAAGCAG TGGACAAATT CTCCATTGTA

4870 4880 4890 4900 4910 4920
GCTTTTCCAT TGGCATTTAC AATGTTTAAT GTTAGTTAAT CCACAGTTAA AAATTCCCAT

4930 4940 4950 4960 4970 4980
AATCATAAAT ATCTCGACTT TTCAGCTTGT CTACTGGTGG CACTATTTGT CTCAAACTTT

4990 5000 5010 5020 5030 5040
CGATCAAAAC TATCAGTGAT TGAAGTTTAT CCCTTTTAAT TCCAATAATT CACAGTTGCC

5050 5060 5070 5080 5090 5100
GGTATCTACC TCCATTCTTT TCCGATGATT CGCAGTTTTT CACAGGGTTC AAATGTATCT

5110 5120 5130 5140 5150 5160
CGTTCAATCT TTTTATGGTT ATTTCTCTTG AATGTCCATT TTAATATTTA TAGAACACTT

5170 5180 5190 5200 5210 5220
TTATGTACAT TGTGTTGGTA TTCAATTCGA AAAACAATGA AATTTATTTC TAAATAACTG

5230 5240 5250 5260 5270 5280
CGTTTCTGGG GTTTCTATCA GCACTTACTA GCTGACAAAA ACTTTTCCGT ATTCGGAATT

5290 5300 5310 5320 5330 5340
AGATTTTTAT GCAAGCAATG TTTCATTTTT ACACAGTATA GTATTTATTC TTACTTTTGA

5350 5360 5370 5380 5390 5400
TTATATTGCT CGCACCCTAA ATGACAGGTA TTAGAAATTA ACCGCTTTTC AGAGTATTTT

5410 5420 5430 5440 5450 5460
TAATCTTCTT AGTACTAGTT TAGTTCTTTA AATAAGAAAC CATCTAGTTT TTCATTATCA

5470 5480 5490 5500 5510 5520
CTCAACTTCA GTCGGACAAA TTTTAAATTT TTTACTCGAT AAAAAAATTT TATAATTCAG

5530 5540 5550
ACAAATTATG TCTTCTCATT TTTGATCGCT

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        10         20         30         40         50         60
ATGAAGTTTA TTCCTGAAAT CACACTACTC TTGCTTTTAT [illegible]GTACACTC TACACAGGCT

        70         80         90        100        110        120
AAAGGAAAAC GACGGAAATG TCCGGAGGGT GCGTGGTCGG AAGGAAAGAT TATGAACACG

       130        140        150        160        170        180
ATCATGAGCA ACTACACGAA AATGTTGCCC GACGCGGAGG ACAGCGTACA AGTTAATATT

       190        200        210        220        230        240
GAGATTCATG TACAGGATAT GGGAAGCTTG AATGAAATAT CATCCGACTT TGAAATTGAC

       250        260        270        280        290        300
ATTTTATTCA CTCAACTGTG GCATGACTCG GCACTTTCTT TTGCTCATCT TCCGGCTTGT

       310        320        330        340        350        360
AAGCGAAATA TCACAATGGA AACACGACTT TTACCTAAGA TTTGGTCTCC AAACACGTGT

       370        380        390        400        410        420
ATGATTAATT CAAAACGAAC AACCGTCCAT GCATCACCAT CGGAAAATGT GATGGTTATT

       430        440        450        460        470        480
CTGTACGAGA ATGGAACAGT CTGGATTAAC CATCGTCTTA GTGTCAAATC ACCTTGCAAT

       490        500        510        520        530        540
TTGGATCTGC GACAGTTTCC TTTCGATACT CAAACTTGCA TATTAATCTT TGAATCCTAT

       550        560        570        580        590        600
AGTCATAACT CAGAAGAAGT TGAACTTCAT TGGATGGAAG AAGCTGTCAC ATTAATGAAG

       610        620        630        640        650        660
CCAATTCAAC TTCCTGACTT TGATATGGTT CATTATTCAA CTAAAAAGGA AACTTTACTC

       670        680        690        700        710        720
TATCCAAACG GGTACTGGGA TCAGCTTCAA GTTACTTTCA CTTTCAAACG ACGATATGGA

       730        740        750        760        770        780
TTCTATATTA TTCAAGCCTA TGTTCCAACA TATCTTACAA TCATTGTATC TTGGGTTTCA

       790        800        810        820        830        840
TTCTGCATGG AACCAAAAGC TCTGCCGGCA AGAACAACTG TCGGAATCTC ATCTCTTCTA

       850        860        870        880        890        900
GTTCTTACTT TCCAGTTTGG AAATATTTTG AAAAATCTTC CAAGGGTTTC ATATGTGAAA

       910        920        930        940        950        960
GCAATGGATG TGTGGATGCT TGGATGCATA TCATTTGTCT TCGGAACCAT GGTAGAATTG

       970        980        990       1000       1010       1020
GCATTTGTTT GTTACATTTC CCGTTGTCAG AACAGCGTAA GAAACGCGGA ACGACGACGG

      1030       1040       1050       1060       1070       1080
GAACGAATGA GAAATTCTCA GGTGTGGGCA AACGGATCGT GTAGAACTAG AAGCAACGGG

      1090       1100       1110       1120       1130       1140
TATGCAAACG GGGGATCTGT AATCTCACAT TATCATCCAA CAAGCAATGG AAATGGGAAT
```

Fig. 8

```
      1150        1160        1170        1180        1190        1200
AATAATCGAC ATGATACACC TCAAGTTACT GGAAGAGGAT CACTTCATCG AAACGGGCCA

      1210        1220        1230        1240        1250        1260
CCATCTCCAT TAAACCTTCA AATGACTACA TTTGATTCGG AGATCCCTCT GACTTTTGAT

      1270        1280        1290        1300        1310        1320
CAGCTGCCAG TTTCCATGGA ATCCGATAGA CCCCTGATTG AAGAGATGCG ATCAACATCA

      1330        1340        1350        1360        1370        1380
CCACCTCCAC CATCTGGATG TCTGGCCAGA TTCCATCCGG AAGCAGTGGA CAAATTCTCC

      1390        1400        1410        1420        1430        1440
ATTGTAGCTT TTCCATTGGC ATTTACAATG TTTAATCTTG TCTACTGGTG GCACTATTTG

      1450        1460        1470
TCTCAAACTT TCGATCAAAA CTATCAGTGA
```


Fig. 8
Page 2

ig. 9 a

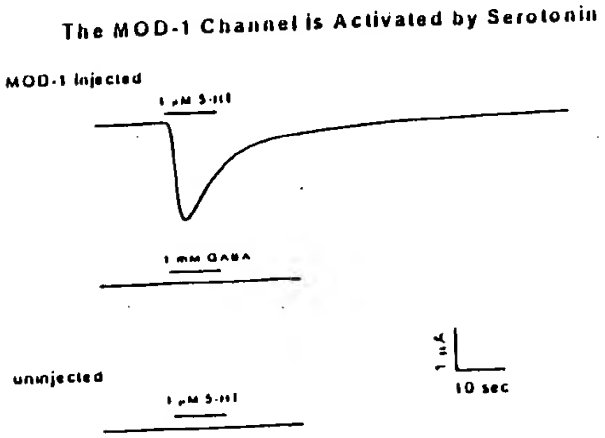


Fig. 9 b

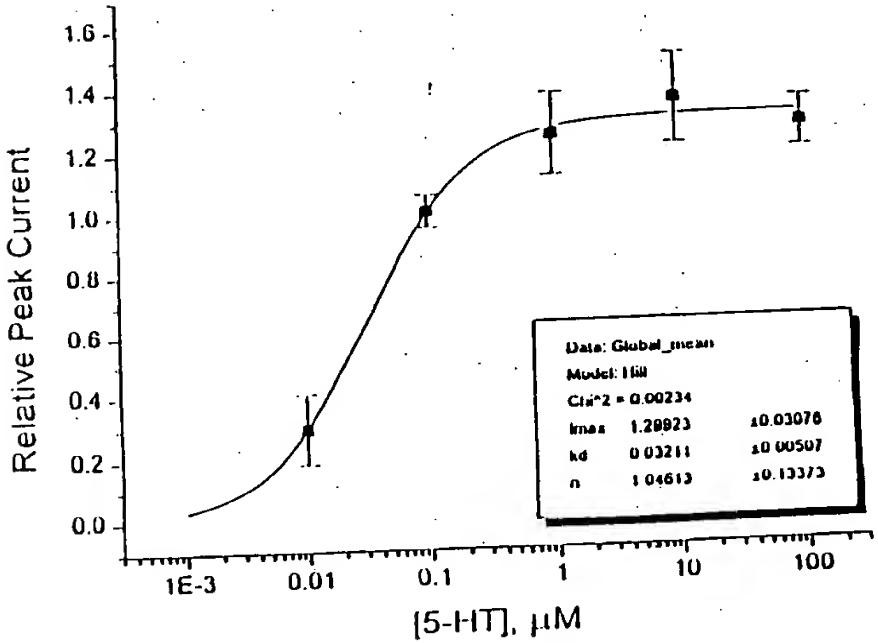


Fig. 9c

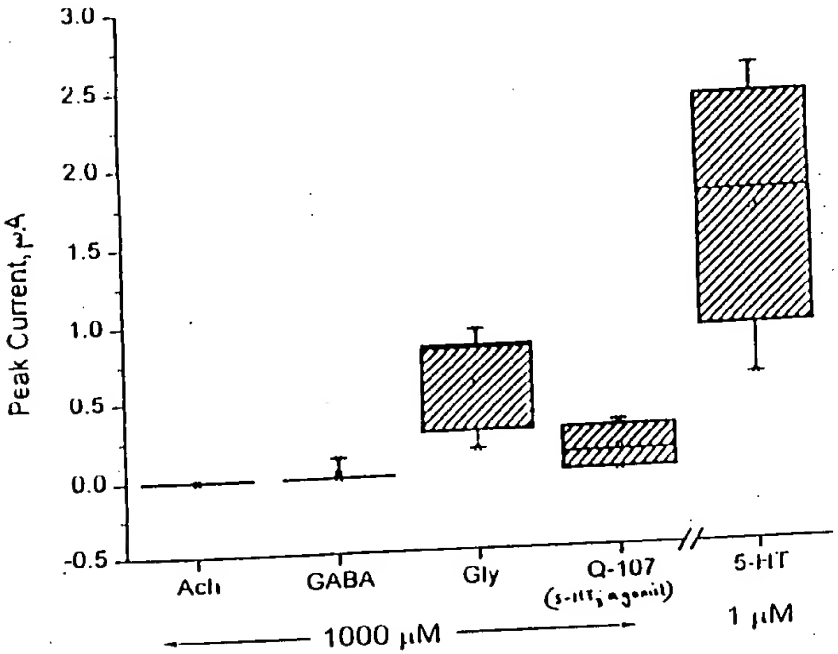


Fig. 9

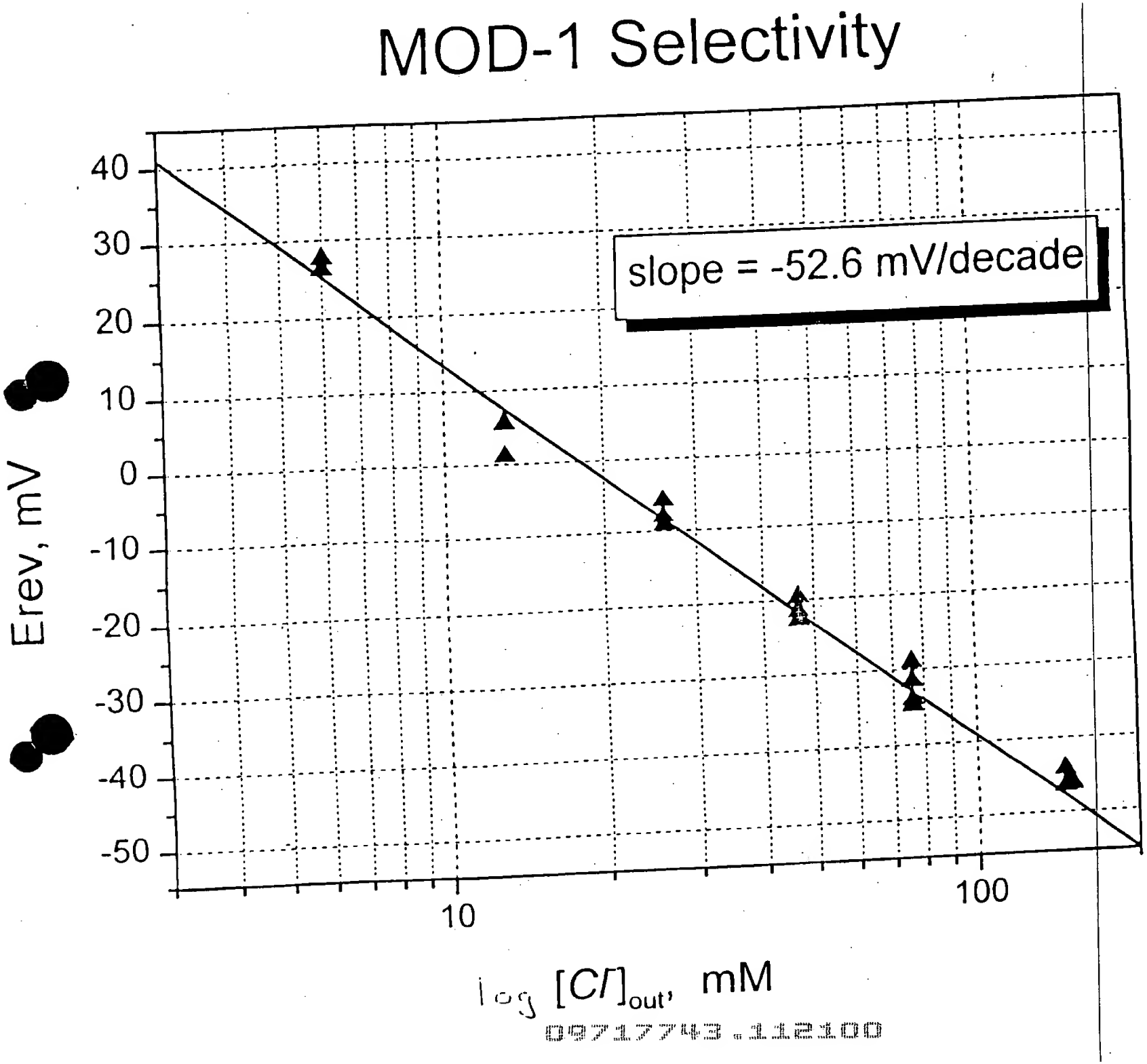


Fig. 10

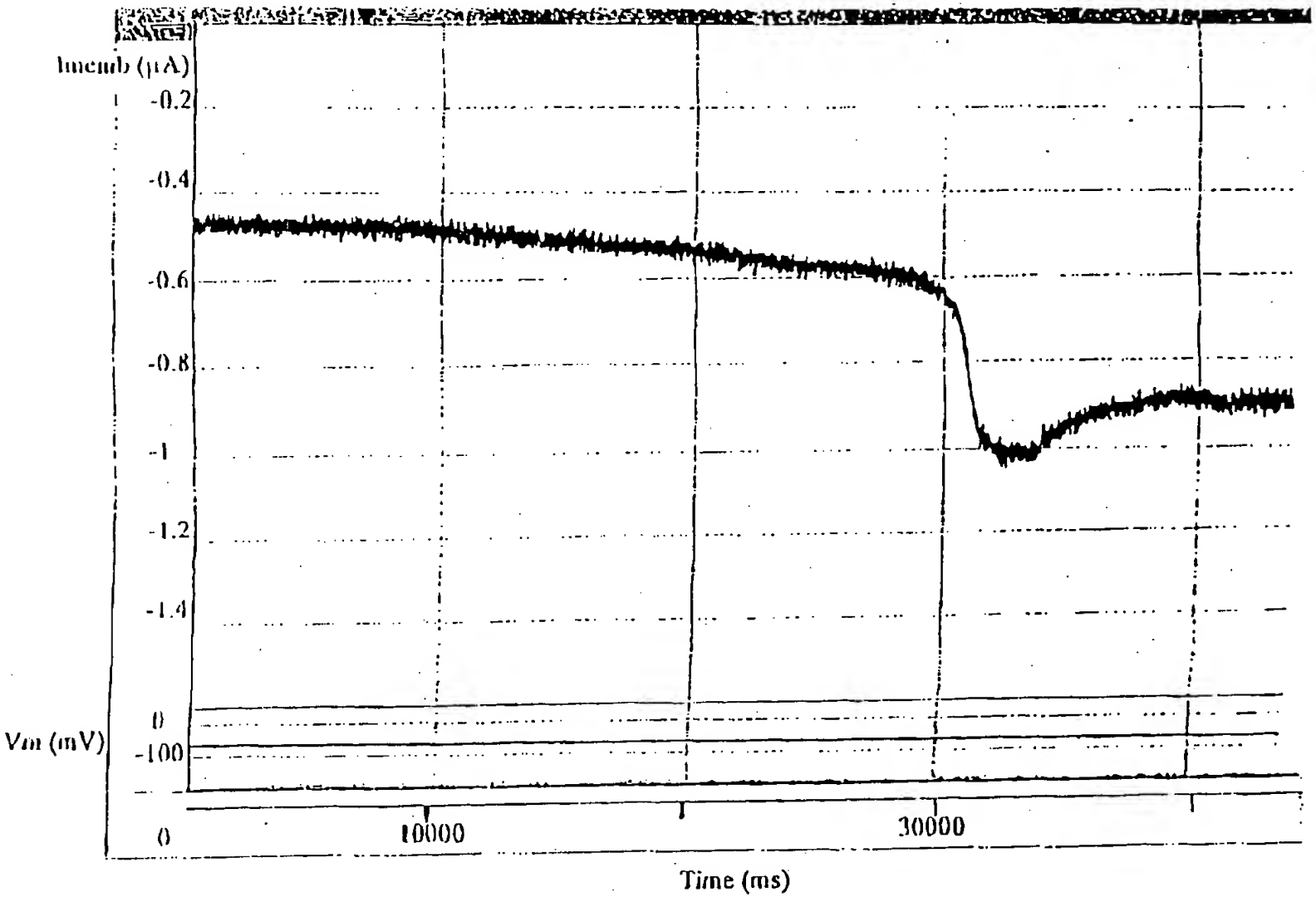
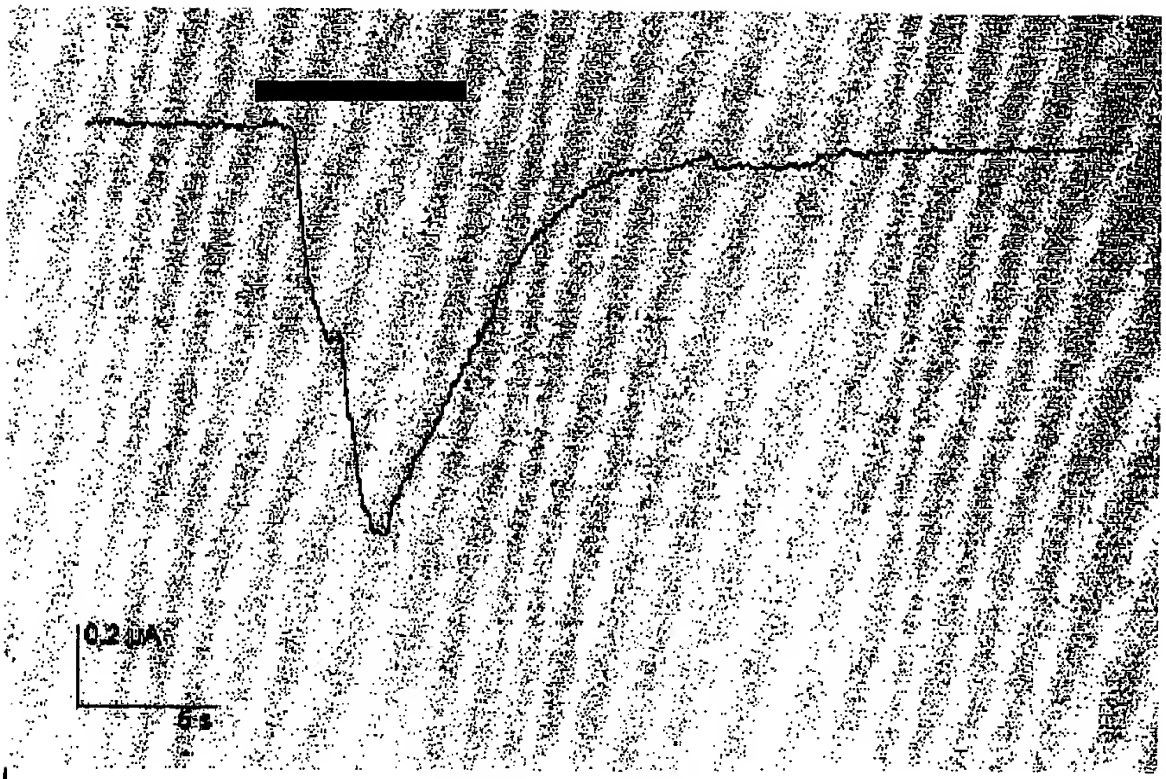

Imemb (pA)
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
Vm (mV)
0
-100
0
10000
30000
Time (ms)
04/01/2000

Figure 11



Oocyte injected with rat cortex poly(A)+ RNA.
Membrane potential -70 mV. 1 μM 5-HT applied (bar)
Oocyte was pretreated with 0.2 mM BAPTA-AM for 2 hours.
The bath solution contained 2 mM Co^{2+} to block 5-HT3a responses.

Fig. 12